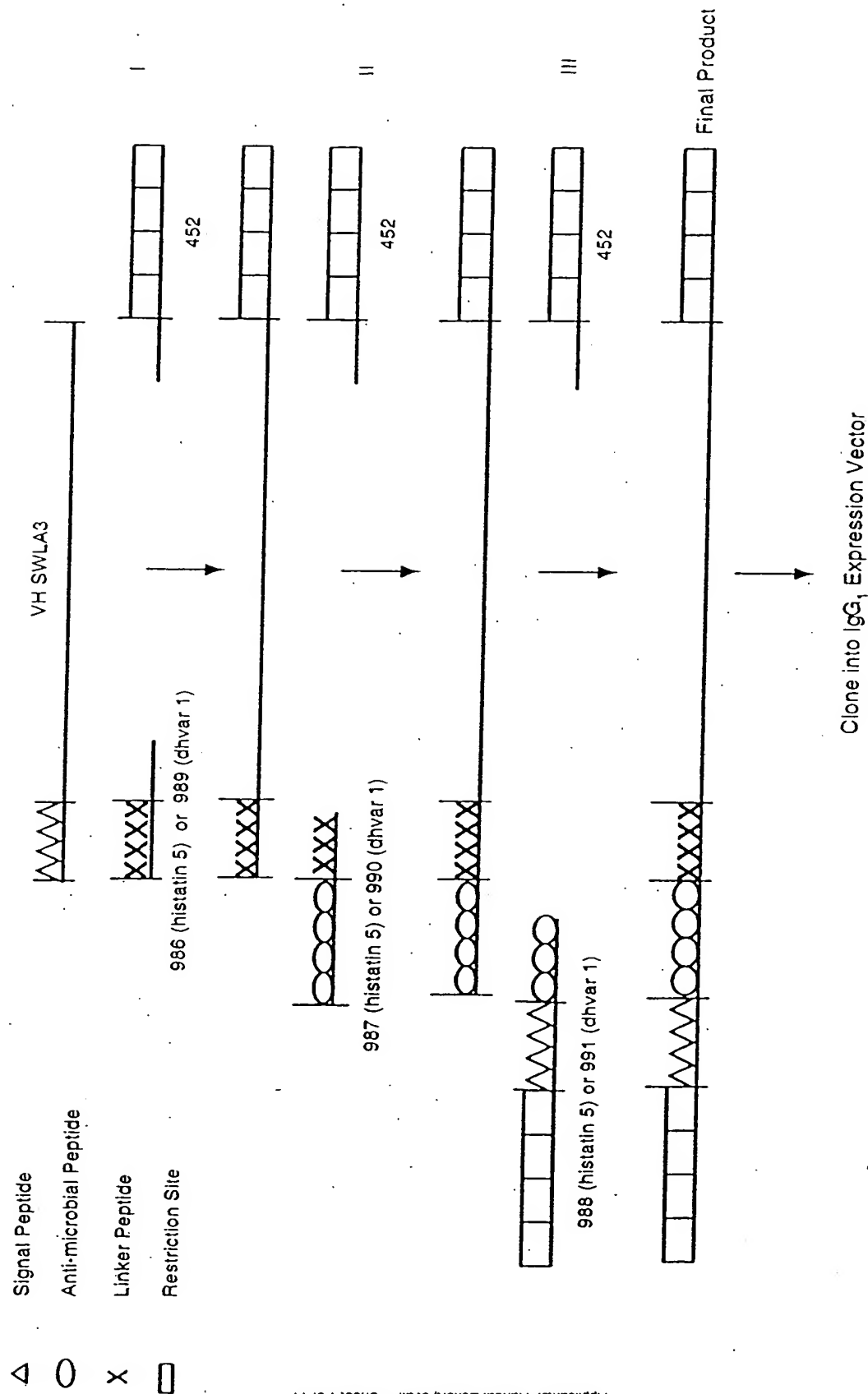


**FIG. 1**

**Sequential PCR Reactions:**

**Addition of Fusion Protein Gene Components to VH SWLA3**



**FIG. 2**

**Primers used in Sequential PCR Reactions:**

986 (SEQ ID NO: 7) 5' CAC CAC TCG CAC AGA GGA TAC TCT GGT GGC GGT GGC TCG  
GGC GGA GGT GGG TCG GGT GGC GGC GGA TCC GAC GTG AAG CTT GTG GAG TC 3'

987 (SEQ ID NO: 8) 5' GGT GTC CAG TGT GAT AGC CAC GCT AAG CGG CAC CAC GGA  
TAT AAG CGG AAG TTC CAC GAG AAG CAC CAC TCG CAC AGA GGA TAC 3'

988 (SEQ ID NO: 9) 5' G GATATC CACC ATG GAC TTC GGG TTG AGC TTG GTT TTC CTT  
GTC CTT ACT TTA AAA GGT GTC CAG TGT GAT AGC C 3'

989 (SEQ ID NO: 10) 5' G TTC AGC CTG CGC AAG TAC TCT GGT GGC GGT GGC TCG GGC  
GGA GGT GGG TCG GGT GGC GGC GGA TCC GAC GTG AAG CTT GTG GAG TC 3'

990 (SEQ ID NO: 11) 5' GTC CTT ACT TTA AAA GGT GTC CAG TGT AAG CGG CTG TTT  
AAG GAG CTC AAG TTC AGC CTG CGC AAG TAC 3'

991 (SEQ ID NO: 12) 5' G GATATC CACC ATG GAC TTC GGG TTG AGC TTG GTT TTC CTT  
GTC CTT ACT TTA AAA GGT GTC CAG 3'

452 (SEQ ID NO: 13) 5' TGG GTC GAC WGA TGG GGS TGT TGT GCT AGC TGA GGA GAC 3'

**FIG. 3**

**Histatin 5 Fusion to VH SWLA3: DNA and Amino Acid Sequence**

ggatatccac catggacttc gggttgagct tggttttcct tgtccttact ttaaaagggtg tccagtgt

gat agc cac gct aag cgg cac cac gga tat aag cgg aag ttc cac gag aag cac cac tcg  
 Asp Ser His Ala Lys Arg His His Gly Tyr Lys Arg Lys Phe His Glu Lys His His Ser

cac aga gga tac tct ggt ggc ggt ggc tcg ggc gga ggt ggg tcg ggt ggc ggc gga tcc  
 His Arg Gly Tyr Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser

gac gtg aag ctt gtg gag tct ggg gga ggc tta gtg aac cct gga ggg tcc ctg aaa ctc  
 Asp Val Lys Leu Val Glu Ser Gly Gly Gly Leu Val Asn Pro Gly Gly Ser Leu Lys Leu

tcc tgt gca gcc tct gga ttc act ttc agt agc tat acc atg tct tgg gtt cgc cag act  
 Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr Thr Met Ser Trp Val Arg Gln Thr

ccg gag aag agg ctg gag tgg gtc gca tcc att agt agt ggt ggt act tac acc tac tat  
 Pro Glu Lys Arg Leu Glu Trp Val Ala Ser Ile Ser Ser Gly Gly Thr Tyr Thr Tyr Tyr

cca gac agt gtg aag ggc cga ttc acc atc tcc aga gac aat gcc aag aac acc ctg tac  
 Pro Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr

ctg caa atg acc agt ctg aag tct gag gac aca gcc atg tat tac tgt tca aga gat gac  
 Leu Gln Met Thr Ser Leu Lys Ser Glu Asp Thr Ala Met Tyr Tyr Cys Ser Arg Asp Asp

ggc tcc tac ggc tcc tat tac tat gct atg gac tac tgg ggt caa gga acc tca gtc acc  
 Gly Ser Tyr Gly Ser Tyr Tyr Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser Val Thr

gtc tct tca gct agc  
 Val Ser Ser Ala Ser

**FIG. 4**

**Dhvar 1 Fusion to VH SWLA3: DNA and Amino Acid Sequence**

ggatatccac catggacttc gggttgagct tggttttcct tgtccttact ttaaaagggtg tccagtgt

aag cgg ctg ttt aag gag ctc aag ttc agc ctg cgc aag tac tct ggt ggc ggt ggc tcg  
 Lys Arg Leu Phe Lys Glu Leu Lys Phe Ser Leu Arg Lys Tyr Ser Gly Gly Gly Gly Ser

ggc gga ggt ggg tcg ggt ggc ggc gga tcc gac gtg aag ctt gtg gag tct ggg gga ggc  
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Lys Leu Val Glu Ser Gly Gly Gly

tta gtg aac cct gga ggg tcc ctg aaa ctc tcc tgt gca gcc tct gga ttc act ttc agt  
 Leu Val Asn Pro Gly Gly Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser

agc tat acc atg tct tgg gtt cgc cag act ccg gag aag agg ctg gag tgg gtc gca tcc  
 Ser Tyr Thr Met Ser Trp Val Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val Ala Ser

att agt agt ggt ggt act tac acc tac tat cca gac agt gtg aag ggc cga ttc acc atc  
 Ile Ser Ser Gly Gly Thr Tyr Thr Tyr Tyr Pro Asp Ser Val Lys Gly Arg Phe Thr Ile

tcc aga gac aat gcc aag aac acc ctg tac ctg caa atg acc agt ctg aag tct gag gac  
 Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Thr Ser Leu Lys Ser Glu Asp

aca gcc atg tat tac tgt tca aga gat gac ggc tcc tac ggc tcc tat tac tat gct atg  
 Thr Ala Met Tyr Tyr Cys Ser Arg Asp Asp Gly Ser Tyr Gly Ser Tyr Tyr Tyr Ala Met

gac tac tgg ggt caa gga acc tca gtc acc gtc tct tca gct agc  
 Asp Tyr Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser Ala Ser

Fig. 5. Construction of PG-1-SWLA3 minibody fusion for expression in *Pichia* – final product

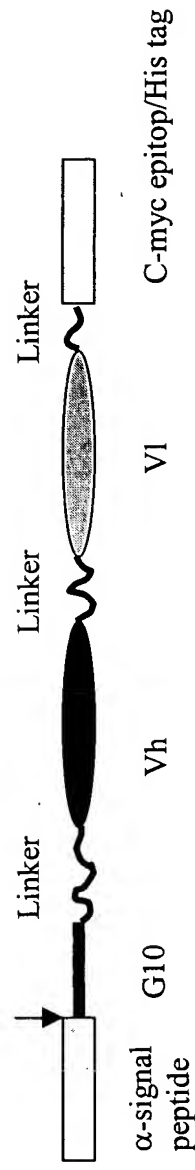


Figure 6. Time-kill of G10 against *P. mendocina*

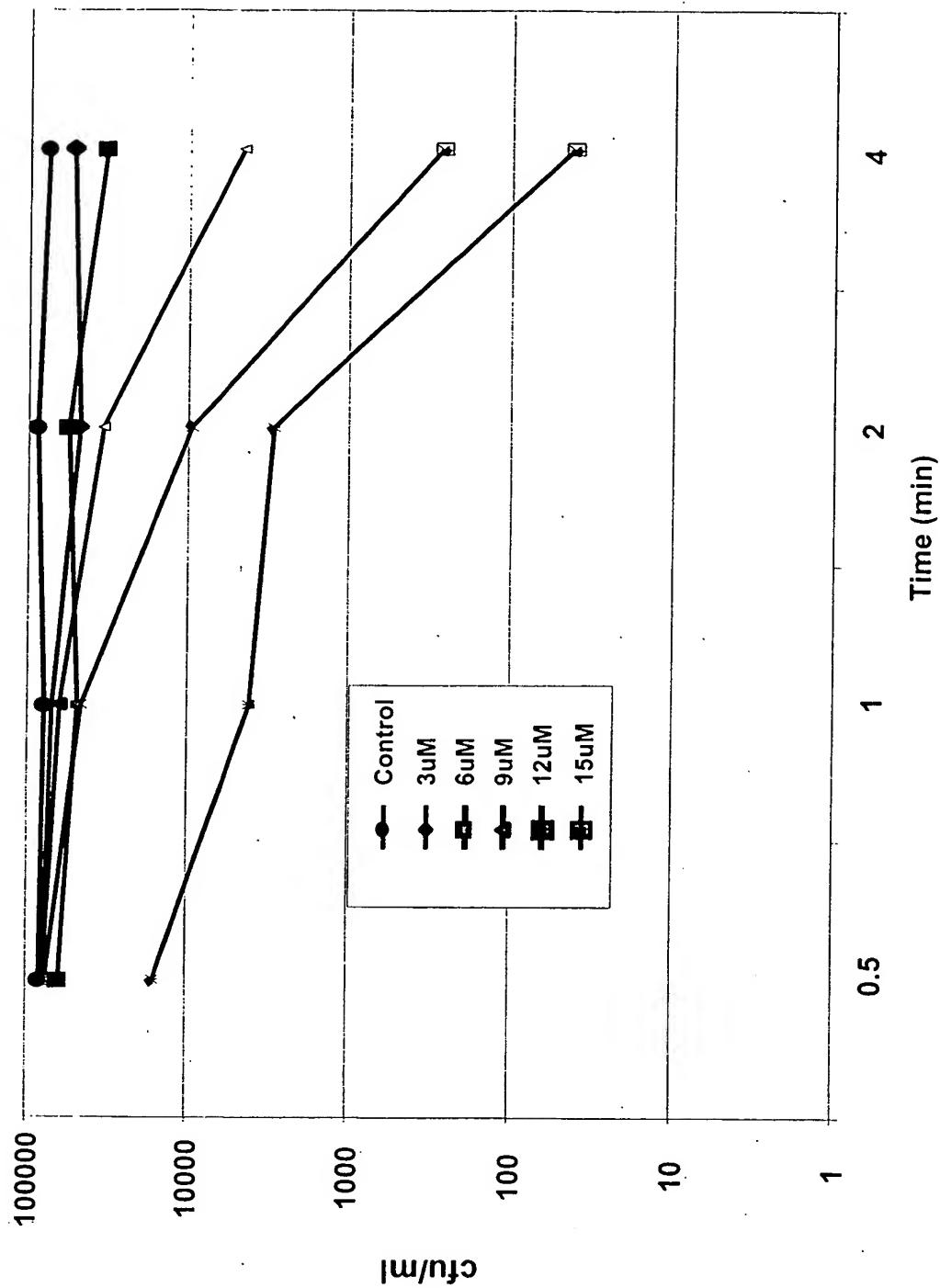


Figure 7. Time-Kill of G10CatC against *P. mendocina*

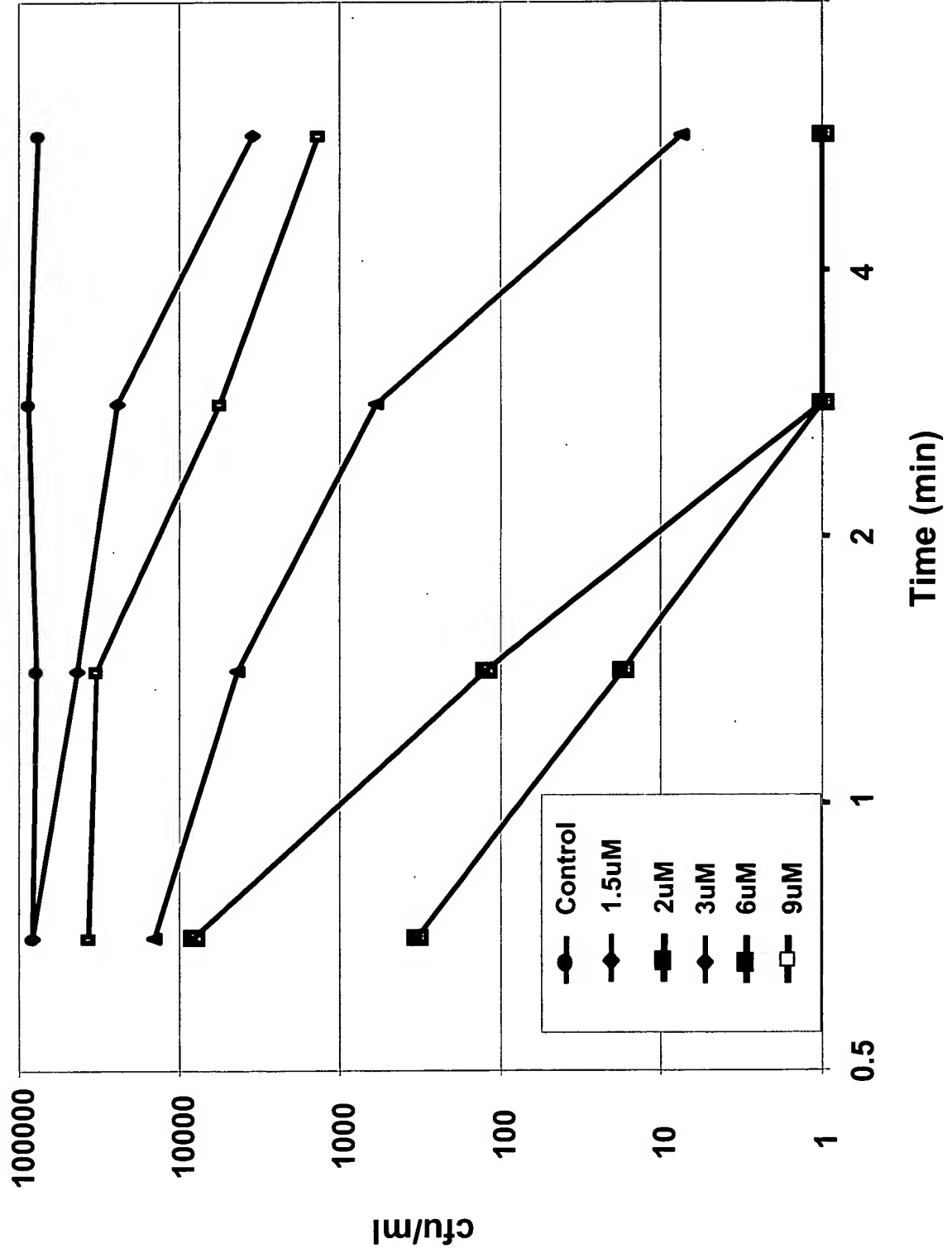
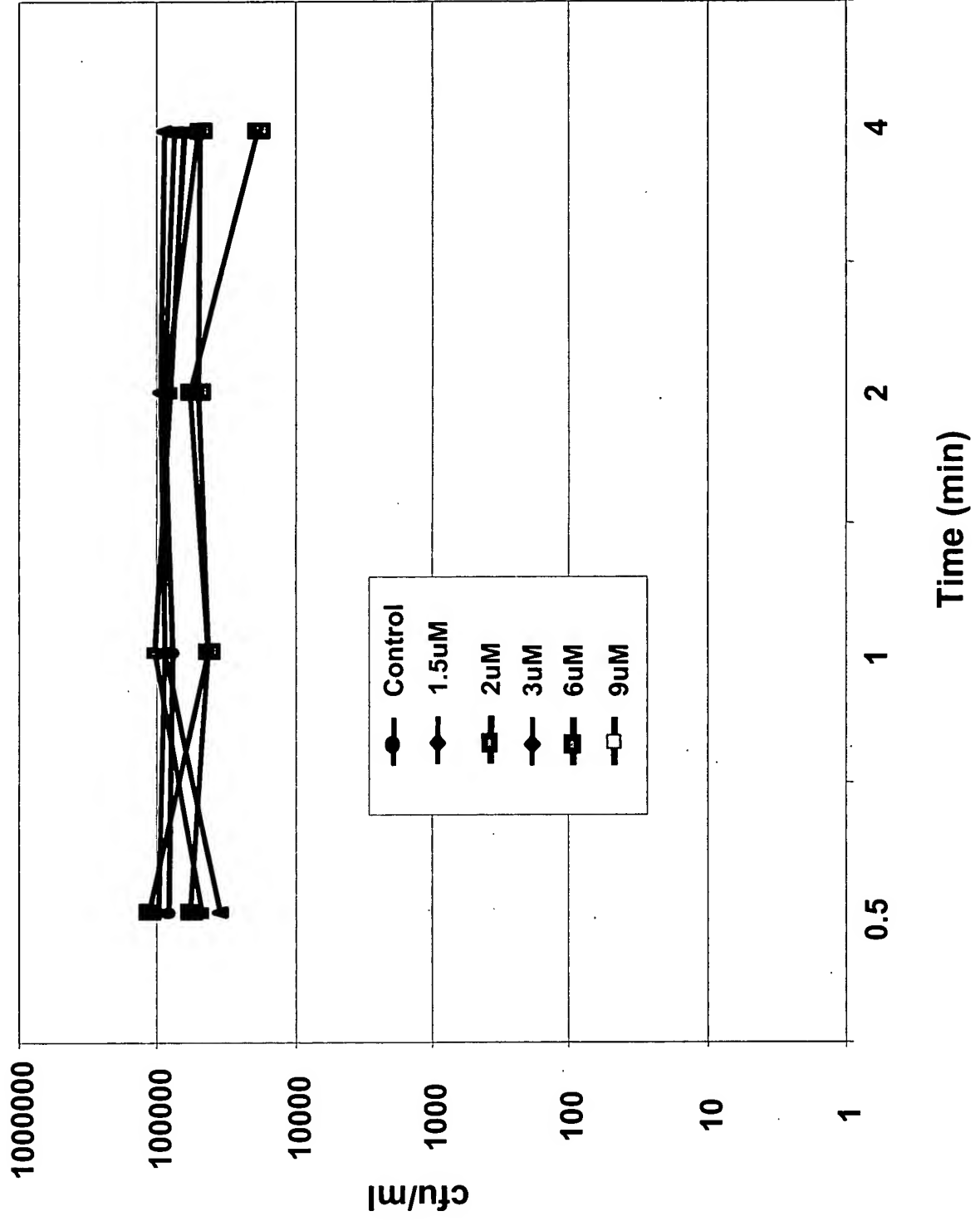


Figure 8. Time-Kill of G10CatN against *P. mendocina*



**Fig. 9. Killing Kinetics of G10 against PAK**

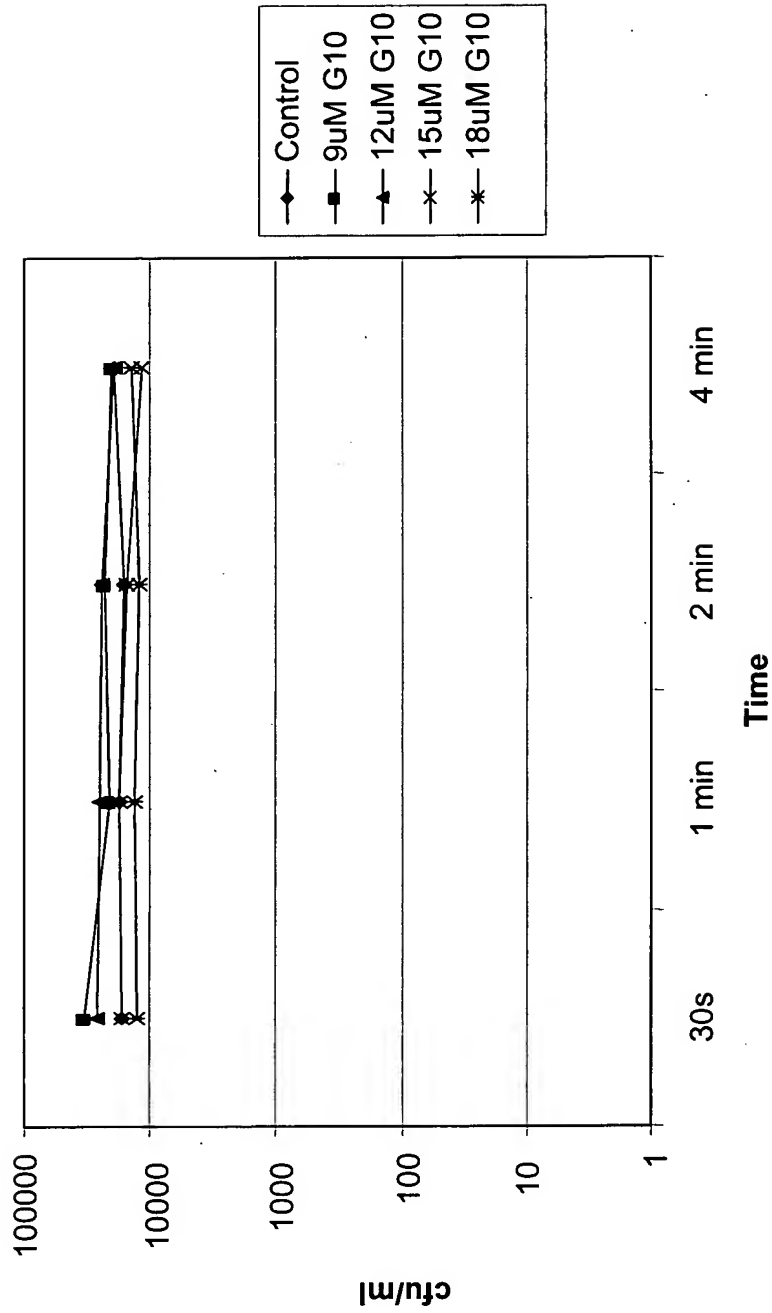




Fig. 10. Killing kinetics of G10CatC against PAK

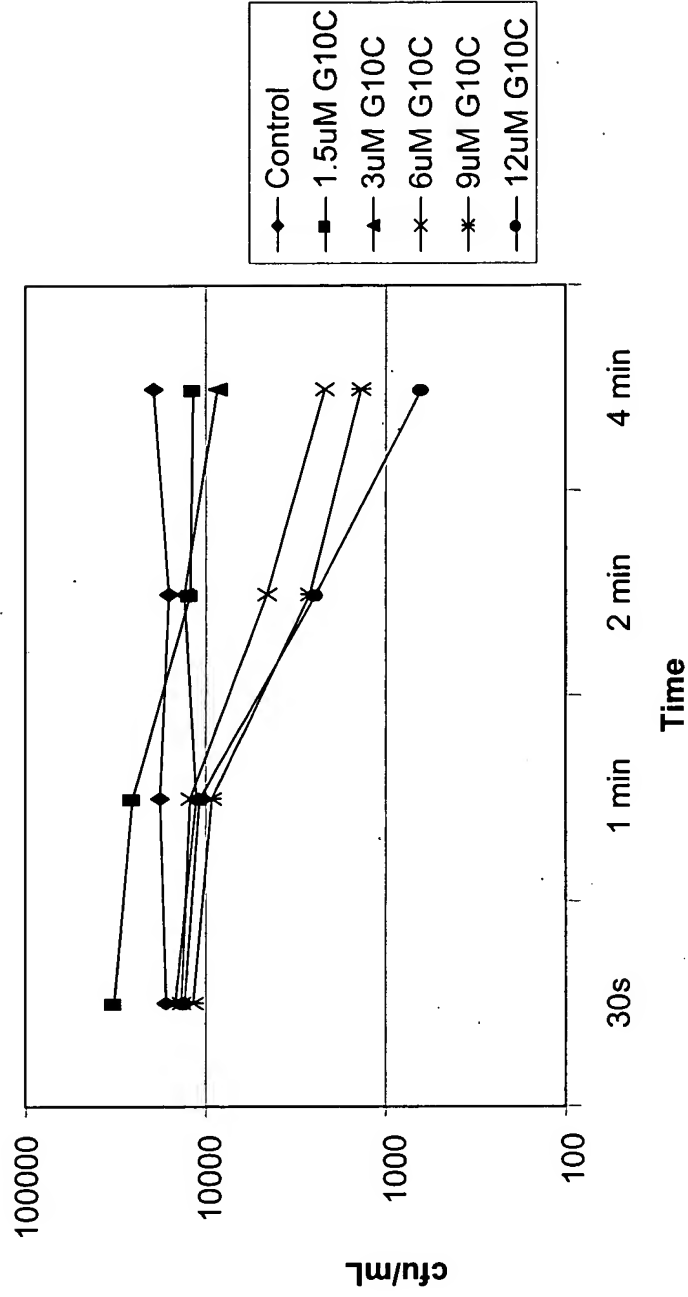


Figure 11. Time-Kill of G10 and G10CatC against *P. mendocina*

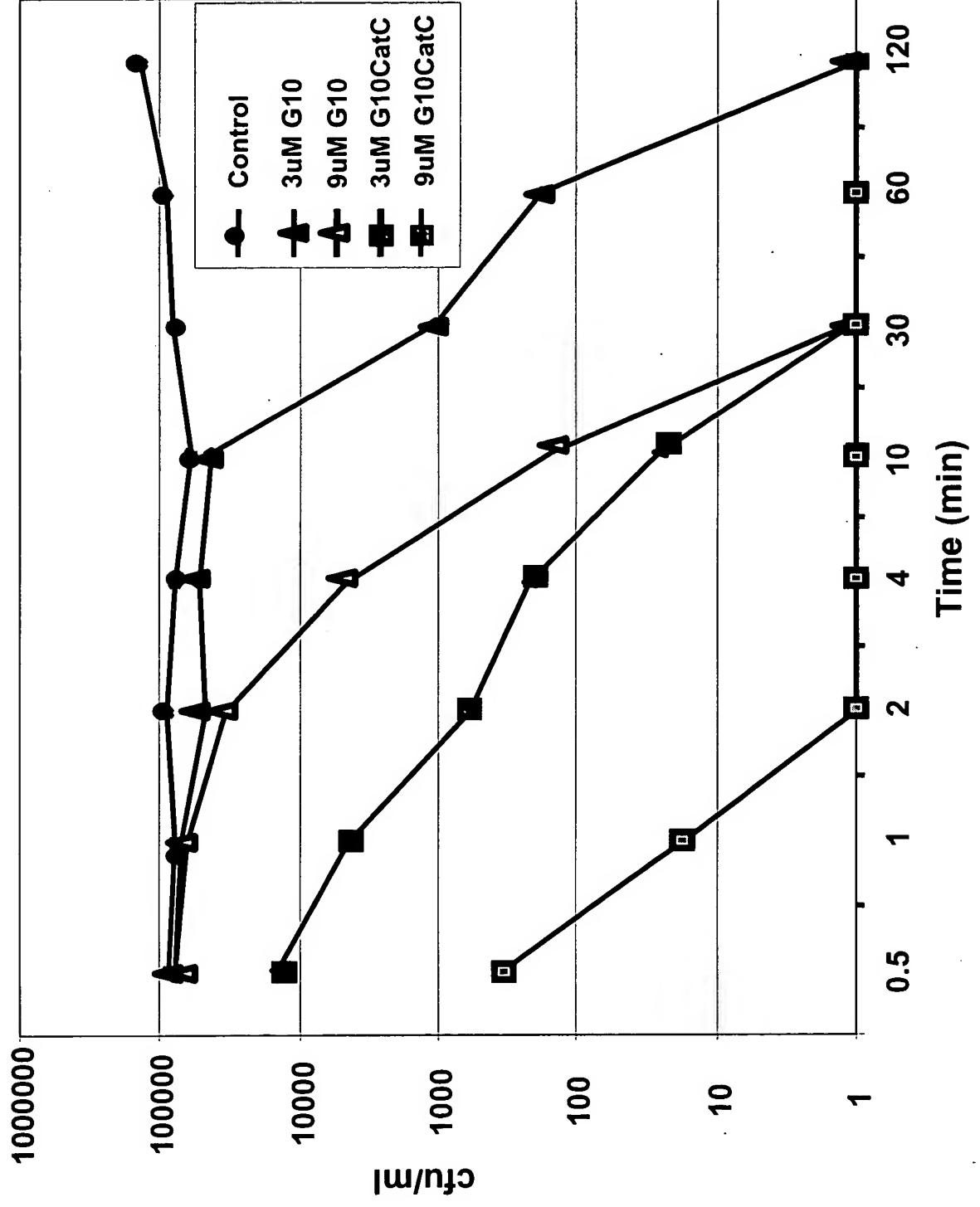


Figure 12. Selective killing of *P. mendocina* by G10CatC in mixed culture

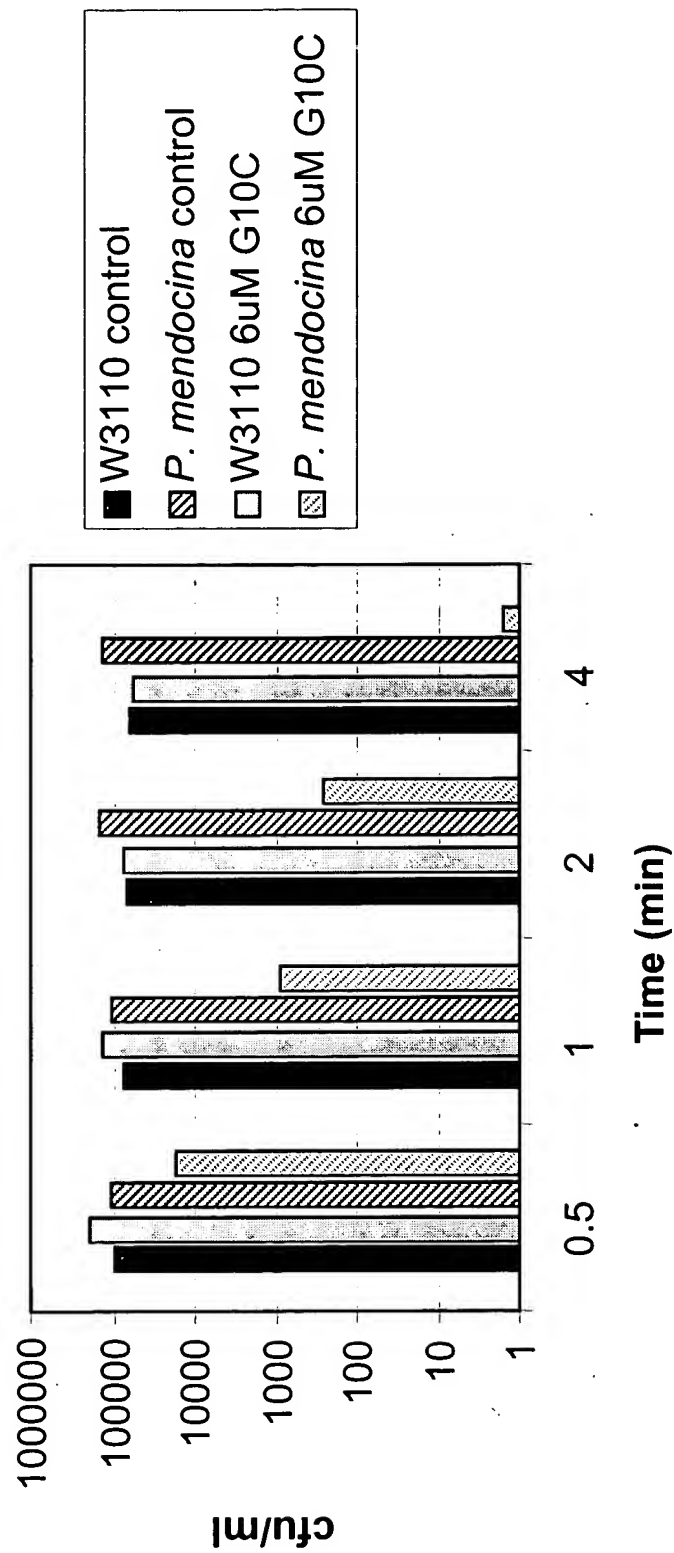


Figure 13. nonselective killing of *P. mendocina* by G10 in mixed culture

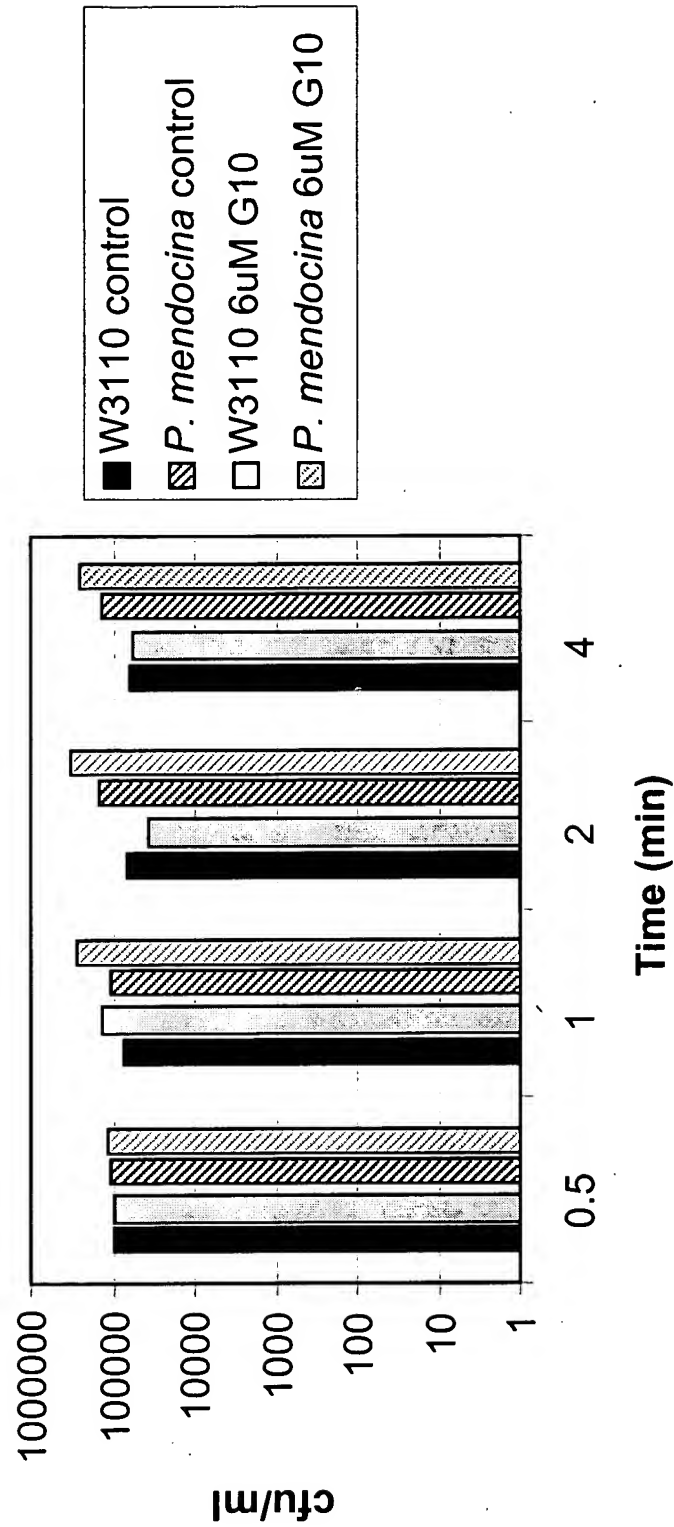
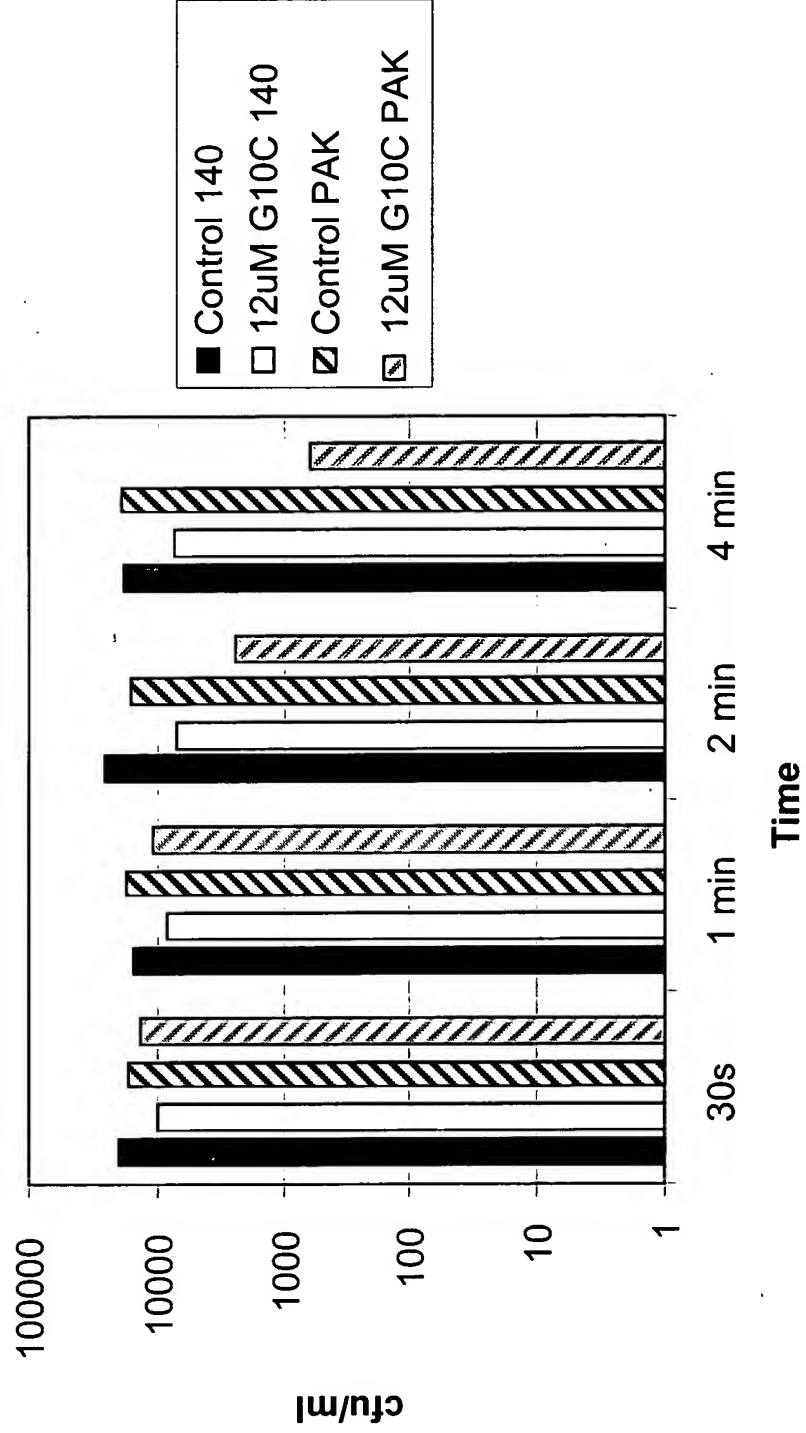


Fig. 14. Selective killing of PAK by G10C in mixed culture with *S. mutans*



**Fig. 15. No selective killing of PAK by G10 in mixed culture with *S. mutans***

